

REMARKS

Claims 1-5, 7-9, 15-19, and 21-23 remain in the application. Claims 1, 4, 15, and 18 have been amended hereby, and claims 6, 10-14, 20, and 24-28 have been cancelled, without prejudice or disclaimer. New claims 29 and 30 have been added by the present amendment.

The claims have been carefully reviewed and amended with particular attention to the points raised in the Office Action. It is submitted that no new matter has been added and no new issues have been raised by the present response.

Reconsideration is respectfully requested of the objection to the drawings.

The drawings in the above-identified application have been amended as required by the Office Action. More specifically, Fig. 15 has been amended to include the legend --(PRIOR ART)--, and the legend "RDIUS r" of Fig. 18 has been amended to read "RADIUS r" as required by the Office Action.

Withdrawal of the objection to the drawings is respectfully requested.

Reconsideration is respectfully requested of the objection to the specification as allegedly containing informalities.

It is respectfully submitted that the phrase "unit time" as used in the disclosure of the present invention is syntactically and grammatically correct, and therefore does not require correction as stated in the Office Action.

The remaining objections have been addressed in the amendments made to the specification hereby.

Withdrawal of the objection to the specification is respectfully requested.

Reconsideration is respectfully requested of the objection to claims 1, 5, 10, and 14 as allegedly containing informalities.

It is respectfully submitted that the phrases "unit time," "one of moves," and "an other" as recited in claims 1, 5, 10, and 14 are syntactically and grammatically correct, and therefore do not require correction as stated in the Office Action.

Withdrawal of the objection to claims 1, 5, 10, and 14 is respectfully requested.

Regarding the rejection of claims 10-11, 13-14, 24-25, and 27-28 under 35 U.S.C. § 112, first paragraph, it is respectfully noted that claims 10-14 and 24-28 have been cancelled, without prejudice or disclaimer, by the present amendment.

Reconsideration is respectfully requested of the rejection of claims 1-2, 4, 6, 15-16, 18, and 20 under 35 U.S.C. § 102(b), as allegedly being anticipated by U.S. Patent No. 5,977,974 (Hatori et al.).

Applicant has carefully considered the comments of the Office Action and the cited reference, and respectfully submits that claims 1-2, 4, 15-16, and 18 are patentably distinct over the cited reference for at least the following reasons.

The present invention relates to an information processing apparatus, an information processing method, and a

data recording medium which allow a display to be presented to a user. The apparatus, method, and medium allow the display of a cyclical time concept which includes nature, creatures, and integration of pictures and comments and is based on a predetermined cycle typically including a sequence of transitions among the four seasons of spring, summer, autumn and winter, or of a day consisting of morning, afternoon, and night, or a cycle can also be a temperature or humidity cycle.

Hatori et al., as understood by Applicant, relates to an information processing apparatus and method. A plurality of data items are stored in a storage medium and time information of each of the data items is obtained. A time axis is displayed in a display window on a display screen. The time axis has a spiral shape and includes arrangement positions each corresponding to a predetermined period of time. At each of the arrangement positions information representing the corresponding data item is displayed on the time axis, corresponding to time represented by the obtained time information of each of the data items. The display size of the information is reduced toward the center of the spiral time axis.

The Office Action states that Hatori et al. discloses, inter alia, spiral period setting means for setting a spiral period of a virtual spiral and spiral axis setting means for setting a spiral axis based upon a predetermined time unit (see Office Action, p. 4, ln. 17 to p. 5, ln. 4).

The Office Action cites col. 9, lns. 51-55 as allegedly disclosing spiral period setting means (see id.). As

understood by Applicant, the time interval of Hatori et al. represents a time interval between adjacent data arrangement positions on the spiral (see Hatori et al., col. 6, lns. 55-62; Figs. 6-7). The assigned period shows a period between data arrangement positions to which date and time are assigned, and is a product of the unit time interval and a data arrangement position interval (see id., col. 7, lns. 8-15).

As understood by Applicant, the unit time interval is defined only in terms of a period of time, and the time period may be adjusted by a user to allow different data to be displayed (see id., col. 9, lns. 38-55).

In contrast, the present invention includes spiral period setting means for setting a spiral period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of the plurality being repeated in accordance with a predetermined pattern, as recited in amended independent claim 1.

The Office Action further cites col. 2, lns. 45-58 of Hatori et al. as allegedly disclosing spiral axis setting means (see Office Action, p. 4, ln. 17 to p. 5, ln. 4).

As understood by Applicant, the cited section of Hatori et al. relates to the display of the temporal order by arranging icons on a spiral time axis, to decreasing the size of the icons as their positions approach the spiral center, and to allowing modification of a range of time expressed by the time axis (see Hatori et al., col. 2, lns. 45-58).

It is respectfully submitted that neither the above-

referenced section nor the remainder of Hatori et al. disclose or suggest spiral axis setting means.

In contrast, in the present invention the spiral axis setting means sets a spiral axis of the virtual spiral that represents a vicissitude of the unit of time, as recited in amended independent claim 1.

It is respectfully submitted that Hatori et al. does not disclose or suggest an information processing apparatus comprising storage means for storing raw data and related time axis data stored in the storage means by association with the raw data, thumbnail icon generating means for generating a thumbnail icon representing the raw data, spiral period setting means for setting a period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of the plurality being repeated in accordance with a predetermined pattern, spiral axis setting means for setting a spiral axis of the virtual spiral that represents a vicissitude of the unit of time, and thumbnail icon array displaying means for displaying the thumbnail icon in an array on the virtual spiral based upon the time axis data associated with the raw data represented by the thumbnail icon, as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited reference. Amended independent claim 15 and the claims depending therefrom are believed to be patentable over the cited reference for at least similar reasons.

Withdrawal of the rejection under 35 U.S.C. § 102(b) is respectfully requested.

Reconsideration is respectfully requested of the rejection of claims 3, 8-12, 17, and 22-26 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Hatori et al. in view of U.S. Patent No. 6,466,237 (Miyao et al.).

It is submitted that amended independent claims 1 and 15 and the claims depending therefrom are patentable over Hatori et al. for at least the reasons set forth above.

The Office Action states that Hatori et al. does not disclose spiral layer synthesizing means and synthesized layer displaying means (see Office Action, p. 6, lns. 15-19). Miyao et al. is apparently cited to show the missing elements.

Miyao et al., as understood by Applicant, relates to an information managing device for displaying thumbnail files corresponding to electronic files and for searching the electronic files via thumbnail file. The information managing device includes a liquid crystal display section and thumbnail display means. The liquid crystal display section displays a cluster of file bundles that are thumbnail files each corresponding to one of the image files to enable searches through image files displayed as original document bundles. The thumbnail display means displays the images in the cluster of file bundles on the liquid crystal display section to partially overlap in a three-dimensional configuration.

As understood by Applicant, however, Miyao et al. does not disclose or suggest spiral period setting means for setting a spiral period based upon a selected one of a

plurality of units of time, each being repeated in accordance with a predetermined pattern, or spiral axis setting means that sets a spiral axis representing a vicissitude of the unit of time, as described above and as recited in amended independent claim 1.

It is respectfully submitted that neither Hatori et al. nor Miyao et al., alone or in combination, disclose or suggest an information processing apparatus comprising storage means for storing raw data and related time axis data stored in the storage means by association with the raw data, thumbnail icon generating means for generating a thumbnail icon representing the raw data, spiral period setting means for setting a period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of the plurality being repeated in accordance with a predetermined pattern, spiral axis setting means for setting a spiral axis of the virtual spiral that represents a vicissitude of the unit of time, and thumbnail icon array displaying means for displaying the thumbnail icon in an array on the virtual spiral based upon the time axis data associated with the raw data represented by the thumbnail icon, as described above and as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited references. Amended independent claim 15 and the claims depending therefrom are believed to be patentable over the cited references for at least similar reasons.

Reconsideration is respectfully requested of the rejection of claims 5 and 19 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Hatori et al. in view of U.S. Patent No. 6,163,317 (de Judicibus); and of the rejection of claims 7 and 21 under 35 U.S.C. § 103(a), as allegedly being unpatentable over Hatori et al. in view of U.S. Patent No. 6,333,753 (Hinckley).

It is submitted that amended independent claims 1 and 15 and the claims depending therefrom are patentable over Hatori et al. for at least the reasons set forth above.

de Judicibus, as understood by Applicant, relates to a method and apparatus for dynamically grouping objects. A graphical user interface is used for automatically subdividing the objects and for grouping the objects into folders or container objects and for representing these folders instead of the associated objects. The grouping is based on one or more of the attributes of the objects, e.g. the object name, the size, the last update. The grouping is useful when many objects are to be represented making it difficult to handle all the objects and to display them on the desktop. Nested groups can be created inside other groups.

Hinckley, as understood by Applicant, relates to an apparatus and method for implementing an on-demand "Tool Glass" based desktop user interface. The interface uses at least one input device capable of detecting touch. A sensed touch transition reflective of a user making or breaking contact with the device such as by touching the device with a finger or lifting a finger from the device causes a "Tool

Glass'' sheet to be displayed or dismissed. To prevent user distraction the detected transitions preferably initiate corresponding predefined animation sequences that occur over preset time intervals within which the ''Tool Glass'' sheet either begins to fade into view as soon as user contact begins and then begins to fade out from view as soon as user contact ends. Such touch sensing can readily be used to provide "on-demand" display and dismissal of substantially any display widget, e.g., a toolbar, based on sensed contact between each hand of a user and a corresponding input device, such as between a preferred hand and a touch sensitive mouse.

It is respectfully submitted, however, that neither de Judicibus nor Hinckley, alone or in combination with Hatori et al., disclose or suggest an information processing apparatus comprising storage means for storing raw data and related time axis data stored in the storage means by association with the raw data, thumbnail icon generating means for generating a thumbnail icon representing the raw data, spiral period setting means for setting a period of a virtual spiral based upon a unit of time selected from a plurality of units of time, each of the plurality being repeated in accordance with a predetermined pattern, spiral axis setting means for setting a spiral axis of the virtual spiral that represents a vicissitude of the unit of time, and thumbnail icon array displaying means for displaying the thumbnail icon in an array on the virtual spiral based upon the time axis data associated with the raw data represented by the thumbnail icon, as described above and as recited in amended independent claim 1.

Accordingly, for at least the above-stated reasons, it is respectfully submitted that amended independent claim 1 and the claims depending therefrom are patentable over the cited references. Amended independent claim 15 and the claims depending therefrom are believed to be patentable over the cited references for at least similar reasons.

Withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.


The references cited as of interest have been reviewed, but are not seen to show or suggest the present invention as recited in the amended claims.

Should the Examiner disagree, it is respectfully requested that the Examiner specify where in the cited document there is a basis for such disagreement.

The Office is hereby authorized to charge any fees which may be required in connection with this Amendment and to credit any overpayment to Deposit Account No. 03-3125.

Favorable reconsideration is earnestly solicited.

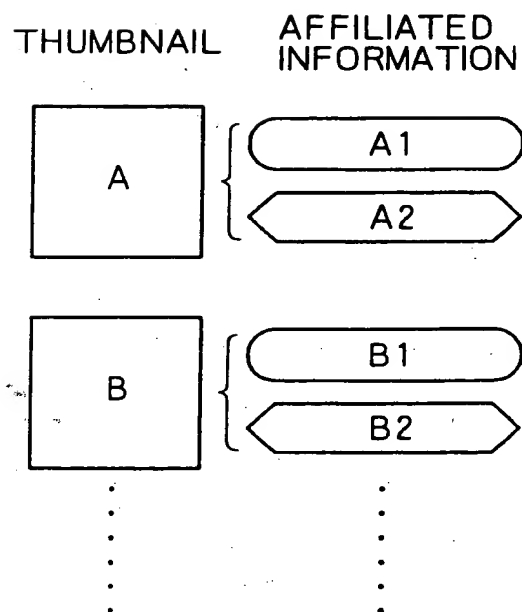
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Attachments
JHM/AVF



FIG. 15



(PRIOR ART)



Annotated Sheet Showing Changes
Application Serial No. 09/942,165

FIG. 18

